

INTERNATIONAL SEARCH REPORT

International Application No
ST/US2004/035719

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/25 G01N33/82

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	RATHMAN SARA C ET AL: "The abundance and function of biotin-dependent enzymes are reduced in rats chronically administered carbamazepine." JOURNAL OF NUTRITION, vol. 132, no. 11, November 2002 (2002-11), pages 3405-3410, XP002320263 ISSN: 0022-3166 cited in the application page 3406, column 2, paragraphs 4,6 ----- -/-	29,30

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

9 March 2005

Date of mailing of the international search report

01/04/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Pellegrini, P

INTERNATIONAL SEARCH REPORT

International Application No

T/US2004/035719

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SLOANE VALERIE ET AL: "Site-directed mutagenesis of ATP binding residues of biotin carboxylase: Insight into the mechanism of catalysis" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 276, no. 27, 6 July 2001 (2001-07-06), pages 24991-24996, XP002320264 ISSN: 0021-9258 cited in the application page 24992, column 1, paragraph 5 - column 2, paragraph 7	29, 30
A	PURCELL W THOMAS ET AL: "Novel antifolate drugs." CURRENT ONCOLOGY REPORTS. MAR 2003, vol. 5, no. 2, March 2003 (2003-03), pages 114-125, XP009044640 ISSN: 1523-3790 cited in the application the whole document	1-6, 8-12, 14-20, 22-34
A	US 5 698 556 A (CHAN ET AL) 16 December 1997 (1997-12-16) cited in the application the whole document	1-6, 8-12, 14-20, 22-34

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/035719

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 7, 13, 21
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Continuation of Box II.2

Claims Nos.: 7,13,21

Claims 7, 13 and 21 are unclear (article 6 PCT), as the folate antagonist is defined not in terms of actual, concrete technical features (e.g. the chemical structure) which would clearly and unambiguously characterize it, but rather in terms of the method of identifying it, namely the method of claim 1 or claim 8. Such definition might encompass known folate antagonists and does not allow to distinguish between novel and known folate antagonists. Furthermore, no folate antagonists identified with the method of claim 1 or claim 8 are disclosed in a clear way by the application. Hence, no search could be performed with respect to these claims.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

CT/US2004/035719

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5698556	A	16-12-1997	NONE